SOME HABITS OF THE ENGLISH SPARROW (PASSER DOMESTICUS).1

BY CHARLES W. TOWNSEND, M. D.

A CERTAIN Spanish proverb advises us in case we "do not get what we like to like what we get." I am doubtful whether my philosophy will ever bring me to the point of liking the English Sparrow, but as most of my life is spent within the confines of brick-lined streets, where the chief and nearly solitary ornithological species is this same English Sparrow, it has seemed to me wise to observe and to jot down my observations on the habits of this much hated, and therefore much neglected bird. I shall not refer here to the large subject of the relations of this alien to our native birds, for of that side of the question much has been written, and this too although my notes abound in such data and hark back to the time when the English Sparrow was only beginning to drive out the Tree Swallow and other box-building birds from our cities. Most of the present day bird students can with difficulty realize that about thirty years ago Tree Swallows were common breeding birds even in our large cities. But I must avoid this sad and irritating side of the subject.

In the description of the habits of passerine birds, the account of their song generally occupies an important part, but in the case of the English Sparrow the song is reduced to the simplest terms and consists merely of a repetition of the call notes. Whether the primitive nature of their song is due to the fact that it has never developed beyond this point, or whether it is a degeneration or reversion from a more evolved song are merely matters of conjecture, but it seems reasonable to suppose that in either case the noise and hubbub of mankind among which the birds live has something to do with is harsh, unmusical character.

That this repetition of the call notes constitutes their song, one cannot doubt who has listened to the jangling racket on a spring morning. This 'chorus' begins from twenty to thirty minutes before sunrise in April, May and June on bright days,—fifteen

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or twenty minutes later on cloudy days,— and lasts in full volume nearly an hour. A few scattering chirps are first heard from the early ones, but the multitudes on vines and trees and house-tops soon take up the theme, and the din is almost deafening. The chief note is chis-ick or tsee-up monotonously repeated, with various modifications, for the most part high pitched and ear racking, but occasionally deeper and almost melodious. Certain individuals repeat notes or even series of notes that are not unattractive, and may even be called musical. These are not common but may be heard every spring, and, on mild days, even as early as January. At the height of the morning chorus, for such it must be called, there is at times a distinct rhythm, caused by some of the birds keeping time. This chirping rhythm I have frequently tried to count but generally without success, for each bird appears to chirp manfully on his own hook without regard to time. I have, however, sometimes found its rate to be 60 or 70 times a minute, slowing down to 40 on hot days. In this respect the Sparrow differs directly from the cold blooded insect that sings faster the hotter the weather.

Individual singers may be heard at almost any time during the day in the spring months, but after the morning chorus, scattering chirps, conversational tones and angry scrapping notes are more common, as well as the loud rattling call which seems to be almost entirely limited to the female, although I have occasionally heard it from the male. This rattling call is frequently emitted by the female as she flies to feed her young either in the nest or on the street, as well as when she playfully or in anger flies at her mate. I do not feel sure of the full significance of this rattle and it deserves further study.

An early morning in August in the city lacks this chorus, just as in the country August mornings are as destitute of our native birds' songs as June mornings are full of them, which helps to prove the assumption just made that the House Sparrow is a songster even if a vile and primitive one. Thus in late August the sparrows may be heard to chatter in conversational ways beginning ten or fifteen minutes before sunrise, but there is no rapid repetition of call notes, no chorus, no hint of a song.

As the extermination of this bird appears to be utterly out of the question, our only hope lies in education, for it has been found by

several experimenters that the young English Sparrow separated from his unmusical parents and associated with song birds, readily acquires his foster parents' melody. A few such educated ones in each city might prove to be missionaries in a good cause. Certainly we may hope for this in the millennium! Until that time we can look upon the present infliction of their 'song' as an opportunity to cultivate our philosophy, and to turn deaf ears to it, or to seize with pleasure on the occasional musical notes welcoming the spring.

One of the most noticeable habits of the English Sparrow, is the courting that goes shamelessly on under our very feet. The strut of the male — and he is a handsomely marked bird but woefully smoke begrimmed these soft coal days — is always amusing. With flattened back, head held up and tail down, wings out from the body, the tips of the primaries touching or nearly touching the ground, he hops back and forth before the cov female as if on springs. Not one but several dance thus before a lady who barely deigns to look at them, and then only to peck in feigned disgust at the love-lorn suitors. These pecks are often far from love pats. At times she stands in the middle of a ring of males at whom she pecks viciously in turn as they fly by, all chirping excitedly at the top of their lungs. The casual observer might think the lady was being tormented by a crowd of ungallant males, but the opposite is in reality the case for the lady is well pleased and is showing her pretended feminine contempt for the male sex, who on their part are trying their best to attract and charm her. At other times she plants her bill firmly in the head of the suitor, and pecks at him violently from time to time without letting go her hold. I have seen several such one-sided fights, for the oppressed rarely fights back, where the male seemed to be on the verge of exhaustion, lying panting on the ground, but on being disturbed both birds flew off apparently none the worse.

Fights between rival males are also common, and here the birds generally endeavor to fasten their bills into each others heads and necks, and continue the fight until both are exhausted lying on the ground. Peace loving human passers-by generally interrupt these fights, just as they do the fights of street gamins, but the birds generally fly off swearing vigorously as they go, to renew their

fight elsewhere just as do the gamins. In fact there are many points of similarity between the two species.

About a year ago I watched two males in a fierce encounter on the small grass plot in front of my house. One had the other by the bill and held him back downwards on the grass. They were both using their claws vigorously and bracing with their wings. Occasionally they would roll over, or go head over heels. Breaking apart they would fly up at each other like enraged barn-yard cocks. Although I stood within two feet of them, so intent were they that they did not notice me until I made an incautious movement and they fled to fight elsewhere.

A disgraceful fight between two female English Sparrows occured in front of my house one April day. Catching each other by the bills they pulled and tugged and rolled over on the grass. When they broke away the fight was renewed a few inches above the ground in fighting cock style. Three males appeared, and watched the fight. Onc, evidently scandalized, endeavored to separate the Amazons by pecking at them, but they paid no attention to him and only after some time flew away, one chasing the other.

The favorite food of the English Sparrow is the semi-digested oats found in horse droppings, and I have noticed him to forsake some raw oats spilt on the ground for the sake of these semi-digested ones. Although scratching would be a useful accomplishment in the acquisition of this his favorite food, he has not learned it like many other sparrows, but he plies his stout bill vigorously like an axe and effectually accomplishes the object. He has, however, learned to use his tail as a prop like a woodpecker and he may often be seen searching for insects in this position on a tree trunk or even on the vertical side of a brick house.

Like many other birds the English Sparrow suffers from hot weather and shows his distress at such times by wide open mouth.

English Sparrows are decidedly social in their habits. For thirty years or more they have been in the habit of roosting at night in the trees of King's Chapel burying-ground in Boston—perhaps they were attracted by the English associations of the place. I have made several observations of this roost. They frequent the place throughout the year but are decidedly less numerous in the spring months and most numerous during the fall and winter.

Thus on November 25, 1905, between 4 and 5 P. M., I estimated that about 3000 sparrows were in this place on five trees. other two trees were empty. On February 20, 1906, on a mild pleasant day, when the sun set at 5.24 P. M., the roost was studied from the near-by City Hall. The roosting trees seen from above looked as if their limbs had been whitewashed and the ground and grass beneath were similarly affected. The first arrivals appear at 3.45 P. M., about a dozen in all. At 4 the birds are coming singly and in small groups alighting in the trees but frequently changing from place to place, chirping continuously and fighting for positions. At 4.05 a flock of 12 fly swiftly and directly to one tree; 4.10 P. M.: there are now about 150 sparrows present, but new ones are constantly sailing in with wings wide spread from over or between the surrounding high buildings. They fly with astonishing swiftness and directness, projected as it were from space directly into the roost, - is it the city rush and scramble for position? 4.15 P. M. It is now raining birds. I have seen only one alight on a building before entering the roost; they are in too much of a hurry to get there. The trees are a scene of great activity and the noise rises above the roar of the city's streets. The birds are crowding together in the trees, constantly fighting and flying about as they are forced from their perches. At 4.30 the birds are still coming, but by 4.45 there is a noticeable diminution in the numbers of the coming birds and by 5 o'clock the movement has ceased with the exception of a few stragglers. Many are now spreading their wings and tails and composing themselves for sleep. At 5.30 the roost is still noisy but many are fast asleep, and before long all is quiet.

For several weeks before Christmas each year a large department store across the narrow street is brilliantly illuminated by electricity, but the birds sleep quietly notwithstanding the glare and the noise of the traffic. On March 19, 1906, I inspected this roost at 5.45 P. M. during a heavy snowstorm. The birds were as thick as usual but rather lower in the trees and sitting breast to the storm. Although most of them were asleep some were still talkative. On May 11, 1908, I estimated at 6 P. M. that there were perhaps about one tenth as many birds in the roost as in winter. Both males and females were present, the former often strutting in turkey cock attitude and the females picking at them. It is probable that most of the roost consisted of males, but it was evident that a few unmated females yet remained at this late date.

On August 29, 1908, I again watched the Sparrows enter their sleeping quarters at King's Chapel burying-ground, and by counting the birds as they entered for fifteen minutes at a time at intervals, I was enabled to make a fairly accurate estimate of 3400 birds in the roost. With the exception of a few stragglers they all came in between 4.30 and 5.55 p. m. The sun set at 6.28. Judging from the noise, the number of birds in the roost was considerably less than in winter, so that my previous estimate was probably too low.

On November 26, 1905, I watched the King's Chapel roost wake up and depart about its day's business. All were asleep and quiet until 6 o'clock when the first chirp was heard, while the stars were still shining, and the first movement took place at 6.05, when a sparrow flew from one branch to another. The sleeping ones had their heads depressed in front, or the head turned around with the bill concealed in the feathers of the back. A sudden general chirping begins at 6.07 and a few buzz about from branch to branch. The chirping swells into a continuous volume of sound, not the chorus of the spring, but a confused conversational chirping noise as if all were talking at once. Birds buzz about with rapid wing vibrations, suggestive of hummingbirds. The first one flies off in an unsteady way as if still half asleep at 6.12. The sound grows louder, although the majority still appear to be asleep. Some are stretching their wings and preening their feathers. The stars are nearly gone. At 6.20 no. 2 flies off uncertainly. 6.25. Now there is greater noise and activity. Many are flying about and a dozen or more have left. All awake seem to enjoy spreading their tails. A considerable proportion sleep on through the hub-There is very little fighting compared with the evening. Now the birds are leaving constantly. 6.27. They are leaving in bands of 15 or 20 at a time. 6.30 A. M. The stream of outgoers, mostly down Tremont Street to the north, is now continuous and too great to count. The remaining birds are noisy in the extreme, flying about vigorously and filling up the empty trees. 6.35 A. M. It is now broad daylight and the birds are flying off like bees, but more or less in waves. A few still sleep on undisturbed. The sun rose about 6.50 and by that time doubtless all or nearly all of the birds had gone.

Besides the King's Chapel roost there are several other smaller ones that have later been established in Boston, namely, one in the Granery burying-ground, one in some trees on the Common, one in Franklin Square, besides doubtless others. The roost at Franklin Square is within fifty yards of the elevated train and at about the level of the frequently passing trains, yet I have seen the birds sleeping quietly there in the midst of the deafening racket.

In the early days the gathering in King's Chapel burying-ground were viewed with alarm, for it was feared that the imported darlings were about to migrate elsewhere, perhaps to the Mother Country. Alas this migration has never taken place!

THE VIRGINIA AND SORA RAILS NESTING IN NEW YORK CITY.

BY J. A. WEBER.

The marshes inhabited by the rails are situated at the northern portion of Manhattan Island and extend northward and eastward from the foot of the hill at Fort George (190th Street and Amsterdam Avenue). These marshes formerly lined the shore of the Harlem River, but through street improvements have been separated from the river and cut up into small areas. The water in these marshes no longer rises and falls with the tide and the only connection with the river is through drain pipes under the streets; consequently the water is more or less fresh.

The rails first attracted my attention during the early part of June, 1902, when my brother who had climbed into an oak tree overlooking one of the marshes, shouted to me that he saw some water chickens running about in the swamp. I made a thorough search of the marshes on the 24th of the same month and secured a specimen, which proved to be the Virginia Rail (Rallus virginianus). It was the 4th of June, 1905, however, before I discovered any nest and eggs. This nest was found in the cattail marsh